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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,004	11/16/2001	Tse-Hua Lan	US 010611	2589
24737	7590	06/16/2006	EXAMINER	
PHILIPS INTELLECTUAL PROPERTY & STANDARDS			SENF, BEHROOZ M	
P.O. BOX 3001			ART UNIT	
BRIARCLIFF MANOR, NY 10510			PAPER NUMBER	
			2621	

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/996,004

Applicant(s)

LAN ET AL.

Examiner

Behrooz Senfi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7,10-12,14 and 15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7,10-12,14 and 15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/31/06 has been entered.

Response to Arguments

2. Applicant's arguments filed Feb. 15, 2006 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 7 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu (US 2003/0161404).

Regarding claim 7, Wu '404 teaches, method for decoding efficiency of an encoded data video signal employing an MPEG video (i.e. fig. 1), having "VLD and IQ and IDCT and MC and complexity selector" (i.e. fig. 1, VLD, IQ, IDCT and MC), and "receiving a compressed video data stream having a MV associated therewith at the VLD and producing decoded data therefrom" (i.e. fig. 1, VLD) and "determining the type of motion vectors from the decoded data" (i.e. fig. 1, S3) as being one selected from the group consisting of; "a quarter-pel MV, a half-pel MV, and a fractional-pel MV", which place the existing paragraph into a "Markush format", which only require meeting one of the "a quarter-pel MV, a half-pel MV, and a fractional-pel MV" features in the group, therefore (see figs. 11 and 23, also page 5, paragraph 0101) and "dequantizing the decoded data" (i.e. fig. 1, IQ), and "employing the IDCT for transforming the dequantized, decoded data from a frequency domain to a spatial domain to produce different data" (i.e. fig. 1, IDCT) and "employing MC" (i.e. fig. 1, MC) and "full-pix motion compensation" takes place in (i.e. fig. 1, RCMC) and "combining the reference data and the difference data to produce motion compensated picture" (i.e. fig. 1, 8).

Wu '404 is silent in regards to explicitly mention, converting the motion vector to a full motion vector.

However, Wu (page 7, lines 8 – 14) teaches that the motion vector being down-sampled and further indicates that, in either case the motion vectors output from the resolution-converting motion estimator have full resolution. Therefore, in view of the

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above, it would have been obvious to one having ordinary skill in the art that in order to have a full resolution the motion vector would carry all pixels and therefore, consider as a full motion vector.

Regarding claim 12, the limitations claimed have been analyzed and rejected with respect to claim 7 above.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 10, 11 and 14 - 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu '404 in view of Zhong et al (US 2002/0163969).

Regarding claim 10, Wu '404 teach, "a method for decoding efficiency of an encoded data video signal employing an MPEG video, having VLD and IQ and IDCT and MC and complexity selector and receiving a compressed video data stream producing a full-pel video image" as discussed earlier with respect to claim 7 above.

Wu '404 is silent in regards to, "rounding the odd number MV to the nearest even number".

Zhong '969 in the same field (i.e. page 2 and page 3, sections 0027, 0036 and 0038) teaches, round the odd number MV to the nearest even integer number.

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In view of the above, Taking the combined teaching of Wu and Zhong as a whole, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify Wu's coding process in accordance with the teaching of Zhong to round up the motion vector to the nearest even integer number. Doing so would improve the coding efficiency but scarifies image quality.

Regarding claims 11 and 15, combination of Wu and Zhong teaches, "one of p-frame, B-frame and a combination of P and B frames" reads on (i.e. predicted picture/frame in Zhong).

Regarding claim 14, the limitations claimed have been analyzed and rejected with respect to claim 10 above.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nakajima et al	US 6,243,421
Poon et al.	US 6,144,698
Ismaeil et al.	US 2002/0025001

Contact

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Behrooz Senfi** whose telephone number is **(571) 272-7339**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Mehrdad Dastouri** can be reached on **(571) 272-7418**.

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Hand-delivered responses should be brought to Randolph Building, 401 Dulany Street, Alexandria, Va. 22314.

Any inquiry of a general nature or relative to the status of the application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is **(571) 272-6000**,

Or faxed to:

(571) 273-8300

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

B.M.S.

Mehrdad Dastouri
MEHRDAD DASTOURI
SUPERVISORY PATENT EXAMINER
TC 2600